

# MONTHLY WEATHER REVIEW,

## JANUARY, 1874.

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WAR DEPARTMENT,  
*Office of the Chief Signal Officer,*  
DIVISION OF

### TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE

A general summary of the Meteorological Observations taken under the direction of the Signal Service during the month of January, 1874, is presented in the accompanying Charts and Tables.

In reviewing the meteorological condition therein indicated, the most noticeable feature is the excess of mean temperature throughout almost the entire country over that of the corresponding period in previous years, the most marked difference being between the mean temperature of January, 1873, and that of January, 1874.

This average temperature in the several districts, together with the excess, may be found by reference to the table accompanying Chart No. 2, where it will be seen that the excess is greatest near the region of mean low barometer, apparently central over Lower Canada. The area of mean high barometer being central off the South Atlantic coast, the prevailing winds to the west of it were therefore southerly bearing the aqueous vapor from the Gulf of Mexico and Atlantic coast toward the region of low barometer. An excessive humidity in the atmosphere was therefore produced over the greater portion of the United States east of the Mississippi river. The unusual supply of vapor thus diffused over the country prevented a great loss of heat by terrestrial radiation, and tended to increase the mean temperature for the month.

### STORMS.

The movements of those areas of low barometer which produced a definite cyclonic condition of the atmosphere are traced on Chart No. 1, and are numbered in the order in which they occurred. Although treated of under the general title of storms, the atmospheric disturbance, in several instances, was not sufficiently violent to warrant the use of this term.

The first storm that occurred during the month is of particular interest, as it has been traced directly from the Upper Missouri valley to the Atlantic coast. This storm was preceded by gales on the Pacific coast during the 30th and 31st days of December, and the approach of the atmospheric disturbance was indicated by the rapid fall of the barometer, with heavy rain, at Portland, Oregon, and San Francisco. The southerly winds which prevailed upon the coast show that the centre of the disturbance passed to the eastward north of Vancouver's Island.

The midnight report of January 1st announced an area of low barometer in the Upper Missouri valley, as noted on the Chart. From this point the direction of the storm was